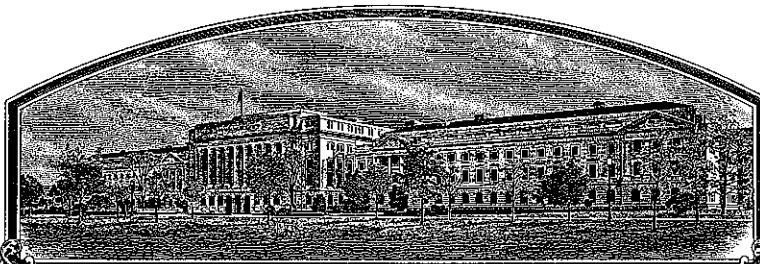


No.

200500109



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Commonwealth Scientific and Industrial Research Organisation

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLINISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'FM 960 B2R'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twelfth day of December, in the year two thousand and five.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

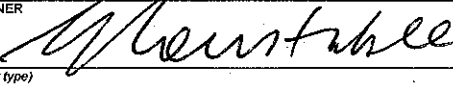
Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER Commonwealth Scientific and Industrial Research Organisation		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME FMX414B2R	3. VARIETY NAME FM 960B2R <i>LM 5/19/05 PER LETTER</i>
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) Limestone Avenue Campbell ACT 2612 Australia		5. TELEPHONE (include area code) (026) 799-1584	FOR OFFICIAL USE ONLY PVPO NUMBER 2005 00 109 FILING DATE JANUARY 31, 2005
		6. FAX (include area code) (026) 799-2427	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Government	8. IF INCORPORATED, GIVE STATE OF INCORPORATION	9. DATE OF INCORPORATION	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Susan J. Mack Sughrue Mion PLLC 2100 Pennsylvania Avenue, N.W. WASHINGTON, DC 20037-3213			FILING AND EXAMINATION FEES: \$ 3,652.00 DATE 1/31/05 CERTIFICATION FEE: \$ 682.00 DATE 9/22/05
11. TELEPHONE (include area code) (202) 293-7060	12. FAX (include area code) (202) 293-7860	13. E-MAIL smack@sughrue.com	
14. CROP KIND (Common Name) Cotton	16. FAMILY NAME (Botanical) Malvaceae	18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION. 94-308-01p, 00-342-01p, 95-045-01p	
15. GENUS AND SPECIES NAME OF CROP Gossypium hirsutum	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no", go to item 23) 21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED 22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	

25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of this certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER 		SIGNATURE OF OWNER	
NAME (Please print or type) Gregory A. Constable		NAME (Please print or type) Gregory A. Constable	
CAPACITY OR TITLE Program Leader	DATE 17 Dec 04	CAPACITY OR TITLE Program Leader	DATE

(See reverse for instructions and information collection burden statement)

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE		
EXHIBIT A ORIGIN AND BREEDING HISTORY OF THE VARIETY		
1. NAME OF APPLICANT(S) Commonwealth Scientific and Industrial Research Organisation	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER FMX414B2R	3. VARIETY NAME FM 960B2R <i>W1519p5</i> FM 960B2R <i>PER LETTER</i>
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) Limestone Avenue Campbell ACT 2612 Australia	5. TELEPHONE (Include area code) +61 2 67991584	6. FAX (Include area code) +61 2 67992427
	7. PVPO NUMBER 2005 00 109	

In 1998, line CPI140533 containing the Cry2Ab gene was imported from Monsanto Corp. USA and crossed with Sicala 40RRi. Four subsequent backcrosses were done at ACRI, Narrabri, with the final being line 99453 × Sicala 40RRi. Following a selfing generation in the glasshouse approximately 80 plants were selected in the field in 2000/01 on the basis of Cry1Ac and Cry2Ab expression, resistance to glyphosate herbicide, leaf hair, disease resistance, lint % and fibre quality. Following progeny row testing for yield, disease resistance and fibre quality in 2001/02, 14 lines proceeded to replicated, multi site trials. Over the seasons of trialing to date, emphasis has been placed on yield and fibre quality under short and mid-season production systems and resistance to verticillium and fusarium wilt. The best line from this screening was FMX414 to be released as FM 960B2R.

FM 960B2R has been observed for four generations of reproduction and during the seed increase period and is stable and uniform. No variants were observed.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE		
EXHIBIT B STATEMENT OF Distinctness		
1. NAME OF APPLICANT(S) Commonwealth Scientific and Industrial Research Organisation	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER FMX414B2R	3. VARIETY NAME FM 960B2R <i>LAW 5/19/05</i> FM 960 B2R <i>PER LETTER</i>
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) Limestone Avenue Campbell ACT 2612 Australia	5. TELEPHONE (include area code) +61 2 67991584	6. FAX (include area code) +61 2 67992427
	7. PVPO NUMBER 2005 00 109	

LAW 5/19/05
PER LETTER
MOST SIMILAR

The following table describes how FM 960B2R differs from its ~~comparator~~, DP 555BG/RR. FM 960B2R contains the Cry2Ab gene from Monsanto while DP 555BG/RR does not; FM 960B2R has a lower height to first fruiting branch than DP 555BG/RR; FM 960B2R is shorter than DP 555BG/RR; FM 960B2R has greater stigma distance above stamens than DP 555BG/RR; FM 800B2R has lower lint percentage than DP 555BG/RR.

Table of distinguishing characters

	FM 960B2R	DP 555BG/RR
Second Bollgard® II gene (Cry2Ab)	Present	Absent
Height to first fruiting branch (cm)		
Mean	19.8	23.3
Range	17.4-22.7	20.6-26.0
LSD (1%)	2.47	
Significance		$P \leq 0.01$
Plant height (cm)		
Mean	108.2	132.8
Range	102.7-112.4	119-141
LSD (1%)	7.62	
Significance		$P \leq 0.01$
Stigma distance above stamens (mm)		
Mean	4.8	3.4
Range	4.0-5.1	20.-4.8
LSD (1%)	0.82	
Significance		$P \leq 0.01$
Lint percentage		
Mean	36.7	43.1
Range	35.5-37.3	41.7-44.7
LSD (1%)	1.34	
Significance		$P \leq 0.01$

Data was obtained from a pooled analysis based on the following two trials:

BCSI Research Station, Leland MS, 2004. Conditions: field grown irrigated trial with conventional management. Trial design: 5 entry trial in a row and column design with six replicates and 14m plots. Measurements on 10 plants from each plot.

Australian Cotton Research Institute, Narrabri, NSW, 2003/04 summer. Conditions: field grown irrigated trial with conventional management. Trial design: 24 entry trial in a row and column design with six replicates and two rows x 14m plots. Measurements on 10 plants from each plot.

Analysis of variance procedures were used to obtain least significant difference statistics at the 1% level.

EXHIBIT C
(COTTON)U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705OBJECTIVE DESCRIPTION OF VARIETY
COTTON (*Gossypium* spp.)

NAME OF APPLICANT(S) Commonwealth Scientific and Industrial Research Organisation	TEMPORARY DESIGNATION FMX414B2R	VARIETY NAME FM 960B2R ^{WAL 15709} FM 960B2R ^{DER} FM 960B2R ^{LET}
ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code) Limestone Avenue Campbell ACT 2612 Australia	FOR OFFICIAL USE ONLY PVPO NUMBER 2005 00 109	

Place the appropriate data that describes the varietal characteristic of this variety in the space provided. Characteristics described, including numerical measurements, should represent those that are typical for the variety. Royal Horticultural Society or any recognized color fan may be used to determine plant colors. Characters marked with an asterisk * indicate necessary characters to be measured.

SPECIFIC VARIETIES USED FOR COMPARISON AS CHECK VARIETIES IN THIS APPLICATION: Use standard regional check varieties which are adapted to your area. One of the comparison varieties must be the most similar variety used in Exhibit B.

Variety 1. DP 555BG/RR Variety 2.

*1. SPECIES:

☒ *G. hirsutum* L.☐ *G. barbadense* L.

*2. AREA(S) OF ADAPTATION: (A = Adapted, NA = Not Adapted, NT = Not Tested)

A Eastern

A Delta

A Central

A Blacklands

A Plains

NT Western

NT Arizona

NT San Joaquin

Other (Specify): _____

3. GENERAL: General Plant Type.

	Application Variety	Comparison Variety 1	Comparison Variety 2	Comparison Variety 3
Plant Habit:				
Spreading, Intermediate, Compact	Intermediate	Intermediate		
Foliage:				
Sparse, Intermediate, Dense	Intermediate	Intermediate		
Stem Lodging:				
Lodging, Intermediate, Erect	Intermediate	Erect		
Fruiting Branch:				
Clustered, Short, Normal	Normal	Normal		
Growth:				
Determinate, Intermediate, Indeterminate	Intermediate	Indeterminate		

3. GENERAL: (continued)

Leaf Color:

Greenish yellow, Light green,

Medium green, Dark green

Medium green**Medium green****Boll Shape:** Length less than width,

Length equal to width,

Length more than width

Length > Width**Length > Width****Boll Breadth:** Broadest at base,

Broadest at middle

Broadest at middle**Broadest at middle*****4. MATURITY:** (50 % Open bolls; Preferred method; Describe method if different method was used.)

Date of 50 % open bolls

September 27**October 4**

5. PLANT:

cm to 1st Fruiting Branch:

(from cotyledonary node)

19.8**23.3****No. of Nodes to 1st Fruiting Branch:**

(excluding cotyledonary node)

7.0**7.3****Mature Plant Height cm:**

(cotyledonary node to terminal)

108.2**132.8*****6. LEAF:** Upper most, fully expanded leaf.**Type:** Normal, Sub Okra,

Okra, Super Okra

Normal**Normal****Pubescence:** Absent, Sparse,Medium, Dense **OR** Trichomes/cm²

(Bottom surface excluding veins)

Sparse**Sparse****Nectaries:** Present or Absent**Present****Present*****7. STEM PUBESCENCE:**

Glabrous, Intermediate, Hairy

Intermediate**Intermediate*****8. GLANDS:** (Gossypol) Absent, Sparse, Normal, More Than Normal**Leaf:****Normal****Normal****Stem:****Normal****Normal****Calyx Lobe:** (normal is absent)**Normal****Normal*****9. FLOWER:****Petals:** Cream, Yellow**Cream****Cream****Pollen:** Cream, Yellow**Cream****Cream****Petal Spot:** Present, Absent**Absent****Absent**

*10. SEED:

Seed Index:

(g/100 seed, fuzzy basis)

12.3

8.9

Lint Index:

(g lint/100 seeds)

8.6

6.9

*11. BOLL:

Lint Percent:

Picked

Pulled

OR

Gin Turnout:

☒ Picked☐ Stripped

36.7

43.1

Number of Seeds per Boll

25.8

28.1

Grams Seed Cotton per Boll

5.4

4.6

Number of Locules per Boll

4.1

4.2

Boll Type:

(Stormproof, Storm Resistant, Open) Storm resistant

Open

12. FIBER PROPERTIES:

Specify Method (HVI or other):

HVI

* Length: (inches, 2.5% SL)

1.18

1.15

* Uniformity: (%)

85.3

83.0

* Strength, T1 (g/tex)

30.3

26.5

* Elongation, E1 (%)

5.9

7.0

* Micronaire:

4.2

4.4

Fineness (Source)

Yarn Tenacity: (cN/tex, 27 tex)

Yarn Strength: (lbs. 22's)

13. DISEASES: (NT = Not Tested, S = Susceptible, MS = Moderately Susceptible, MR = Moderately Resistant, R = Resistant)

NT	<i>Alternaria macrospora</i>	NT	Fusarium Wilt
NT	Anthracnose	NT	Phymatotrichum Root Rot
NT	Ascochyta Blight	NT	<i>Pythium</i> (specify species)
R	Bacterial Blight (Race 1)	NT	<i>Rhizoctonia solani</i>
R	Bacterial Blight (Race 2)	NT	Southwestern Cotton Rust
R	Bacterial Blight (Race 18)	NT	Thielaviopsis basicola
NT	Diplodia Boll Rot	MR	Verticillium Wilt
_____ Other (specify) _____			

14. NEMATODES, INSECTS AND PESTS: (NT = Not Tested, S = Susceptible, MS = Moderately Susceptible, MR = Moderately Resistant, R = Resistant)

NT	Root-Knot Nematode	NT	Reniform Nematode
NT	Boll Weevil	NT	Grasshopper (specify species): _____
R	Bollworm	NT	Lygus (specify species): _____
NT	Cotton Aphid	R	Pink Bollworm
NT	Cotton Fleahopper	NT	Spider Mite (specify species): _____
R	Cotton Leafworm	NT	Stink Bug (specify species): _____
NT	Cutworm (specify species): _____	NT	Thrips (specify species): _____
R	Fall Armyworm	R	Tobacco Bud Worm
_____ Other (specify): _____			

15. COMMENTS: Present any additional information that cannot adequately be described in 1 through 13 which significantly distinguishes your variety.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

**EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP**

1. NAME OF APPLICANT(S) Commonwealth Scientific and Industrial Research Organisation	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER FMX414B2R	3. VARIETY NAME FM 960B2R <i>LAW 5/15/05 PER LETTER</i> FM 960 B2R
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) Limestone Avenue Campbell ACT 2612 Australia	5. TELEPHONE (include area code) +61 2 67991584	6. FAX (include area code) +61 2 67992427
7. PVPO NUMBER 2005 00 10 9		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain.

☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country.

☐ YES ☒ NO Australia10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (If needed, use the reverse for extra space):

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 6 minutes per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.